

Electrochemical Investigation of Properties
of Surface Oxygen Compounds on Silver, by I. N.
Pospelova, A. A. Rakov, S. Ya. Pshezhetskiy,
5 pp.

Full tr

RUSSIAN, no per, Zhur Fiz Khim, Vol XXX, No 7,
1956, pp 1433-1437.

NIE Jnl.: 1956-1964 NLL 11-2788
Navy Tr 1445/NRL 598
Sci - Physics
xerox 1957 CTS/dex Mar 45, 465
T-1657

Combustion of Mixtures of Nitric Acid and Hydrogen,
by A. I. Rozlovskiy.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 7, 1956,
pp 1444-1451.

T.I.L. Tr 4796

Sci - Chemistry
Jun 57

48, 859

On the Question of the Potential Difference at the
Gas-Water Boundary, by A. N. Frumkin, Z. A. Iofa, M.A.
Gerovich, 28 pp.

RUS¹, per, Zhur Fiz Khim (USSR), Vol XXX, 1956,
pp 1455.

AEI/MP Tr 230
SLA 59-12883

Sci - Phys
OTS I, 9
Jun 59

89, 530

Electroconductivity of the Oxides of Group II Metals
of Mendeleev's Periodic System, by A. P. Nakhodkova.
RUSSIAN, per, Zhur Fiz Klin., Vol XXX, No 7, 1956,
pp 1469-1472.
AEC

Sci-Mat & Met
Apr 64

Electroconductivity of the Oxides of Group II
Metals of Mendeleev's Periodic System, by A. P.
Makhodnova,

ROSSIAN, per, Zhur Fiz Kh, Vol XX, No 7,
1956, pp 1469-1472. 7093015

Morris D. Friedman-M101
\$2.50

May RT'S 1959

61-28714

+ AEC

68,589

Sci
Aug 58

Calculation of Thermodynamic Constants of Unsaturated Halides From the E.M.F.'s and Temperature Coefficients of Chemical Cells and Daniell-Jacobi Cells, by B. P. Markov, 7 pp.

RUSSIAN, per, 1 Zhar Fiz Khim, Vol XXX, 1956,
pp 1537-1539.

AEC Tr 2694

Sci - Chemistry
Jan 57 CTS

42,198

Agency: Picatinny Arsenal
P.O. No. 8-70 b

B-10582-D
10 July 69

Title: ~~Unknown~~ pp. 1615 to 1622. 8pp

Author: E.H. Epsom & A.H. Munroe. (E.N. Ermak, et al)

Source: Zh. Fiz. Khim. Vol. 30 (1956).

Language: Russian.

Special instruction: Please translate & type 1 copy only

STATIONARY CONCENTRATIONS OF NITROGEN OXIDES IN DISCHARGE

Studies of the H₂O₂ous Structure of Solids by
Sorption Methods. I. Analysis of Various
Methods for Computing the Distribution of Pore
Volume, by M. M. Dubinin, 23 pp.

RUSSIAN, per Zhur Fiz Khim, Vol XXX, 1956, pp
1652-1661.

SLA R-2025
(AEC Tr 3008)
71,184

Sci
Aug 58

S-81/60

(NY-3549)

The Concentration of Isotopes C¹³ and O¹⁸ in
Carbon Monoxide by the Thermal Diffusion Method,
by G. M. Panchenkov, V. D. Moiseyev, 9 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 7, 1956,
pp 1662-1667.

JPRS 2479

Reverse Trans RUSSIAN to FR
AEC/CEA-Tr-R279

116,488

Sci - Chem
May 60

The Use of a Polarograph for the Automatic Recording
of Polarization Curves in Fused Salts, by L. N.
Antipin, Yu. B. Kholtanskikh, S. F. Vaishen, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, 1956,
pp 1672-1675.

Sci - Chemistry
Jan 57 CTS

AEC Tr 2695
15 LIB GB 45
42,199

Kinetics and Mechanism of the Decomposition
of Hydrocarbons. VIII. The Influence of
Addition of Butylene on the Kinetics of Cracking
of Alkanes, by A. P. Stepukhovich, Krol',

RUSSIAN, no per, Zhur Fiz Khim, Vol XXX, No 8,
1956, pp 1718-1726.

Tech and Comm
\$40.00

49,234

Sci - Chem
Jul 57

Kochergin, S. M. and Nikulin, V. N.
CRYSTALLITE ORIENTATION IN ELECTROLYTIC
TIN DEPOSITS. [1961] 3p. (4 figs. omitted) 8 refs.
Order from OTS or SLA \$1.10

61-20736

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1956,
v. 30, p. 1727-1728.

DESCRIPTORS: *Electrolytes, *Tin, *Deposits, Crys-
tal structure, Electrolysis, Electrodeposition.

Electrolytic tin deposits can be produced both with a
disoriented placement of crystallites and with a
markedly pronounced axial texture. Deposits produced
in stannate electrolytes have a weak orientation of the
crystallites; it improves with smaller grains and
reaching a sufficient thickness of the deposit. The
texture is clearly seen when the deposition is made in
a sulphate electrolyte. When the grain size decreases
(Chemistry--Physical, TT, v. 7, no. 9) (over)

61-20736
I. Kochergin, S. M.
II. Nikulin, V. N.

Office of Technical Services

On the Composition of Rust Formed on Iron Exposed
to Water and Air, by I. V. Krotov.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 8, 1956.

Navy Tr 1505/NRL 609

Sci - Chem

50, 455

Jul 57

The Oxidation of Sulfur Dioxide on Activated Carbon With the Liquid-Contact Method, by E. H. Obchinnikova, Davtian.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXX, No 8, 1956, pp 1735-1738.

Tech and Comm
\$40.00

Sci - Chem
Jul 57

49,235

FEB 19 1958
FEB 19 1958

The Influence of the Addition of Metal-Oxides
on the Reduction of Mg_3O_4 With Carbon, by
D. Averbukh, Chufarov.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXX, No 8,
1956, pp 1739-1745.

Tech and Comm
\$55.00

Sci - Chem

49, 235

The Reciprocal Solubility of Polymers. II.
The Viscosity of Rubber Mixture and the Behavior
of Their Solutions, by G. L. Slonimskiy,
Komskaya,

RUSSIAN, no per, Zhur Fiz Khim, Vol XXX, No 8,
1956, pp 1746-1751.

Tech and Comm

\$50.00

49,236

Sci - Chem
Jul 57

Copolymerization of Unsaturated Compounds. I.
Study of Copolymerization of Isoprene With
Styrene, by E. Lipatova, et al.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXX, No 8,
1956, pp 1752-1759.

Tech and Comm
\$75.00

49,238

Sci - Chem
Jul 57

Adsorption Potential of Concentrated Solutions
of Inorganic Acids, by D. S. Gorenkov. UML

RUSSIAN, per, Zhar Fiz Khim, Vol XXX, 1956,
pp 1830-1839.

DSIR Leading Library Unit
M. 174

Sci - Chem
Apr 59

85,099

Dubinin, M. M. and Zhukovskaya, Ye. G.
STUDY OF THE POROUS STRUCTURE OF SOLIDS
BY SORPTION METHODS. II. COMPARISON OF DIFFERENT
METHODS OF CALCULATING PORE-VOLUME AND SURFACE DISTRIBUTION WITH
RESPECT TO SIZE FOR SORBENTS ON TYPICAL
EXPERIMENTAL MATERIAL. [1961] 12p.
Order from ATS \$17.40 ATS-98NSOR

Trans. of Zhur[na] Fiz[icheskoy] Khim[ii] (USSR)
1956, v. 30, no. 8, p. 1840-1851.

DESCRIPTORS: Solids, *Porous materials, *Porosity,
*Adsorption, Adsorbents, Test methods.

OTS 62-16188

(Chemistry--Physical), TT, v. 6, no. 2)

61-22376

- I. Dubinin, M. M.
- II. Zhukovskaya, Ye. G.
- III. Title: Comparison...
- IV. ATS-98NSOR
- V. Associated Technical Services, Inc.,
East Orange, N. J.

ATS/RJ-2026

101860

Office of Technical Services

Study of the Mechanism of Catalytic Hydrogenation
of Organic Sulfur Compounds on Iron-Chromium
Catalysts by the Method of Marked Atoms. I.
Study of the Catalytic Hydrogenation of Carbon
Bisulfide and Thiophene, by F. P. Ivanovskiy,
et al.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXX, No 8,
1956, pp 1860-1866.

CT2-77-67-16890A1000 Tech. Transl. CIA
Tech and Comm
\$60.00

Sci - Chem
Jul 57

49, 237

S-86/60

(NY-3548).

The Concentration of a Heavy Isotope of Nitrogen
by Thermal Diffusion, by B. A. Geller, 11 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 8, 1956,
pp 1871-1876.

JPRS 2458

Sci - Chem
Apr 60

112, 624

Remark on the Dependence of the Hydrogen Over-voltage on the Nature of the Cathode in Connection with the Work of Rustchi, by M. I. Temkin and A. N. Frumkin, 9 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 8, 1956,
pp 1885-1888.

SLA R-2016

Sci

Aug 58

71,218

Some Shortcomings in the Development of Chemical Thermodynamics for Phases with a Variable Composition, by B. F. Ormont, 7 p.

RUSSIAN, per, Zhur Pis Khim, 1956, Vol XXX, No 8,
pp 1896-1899.

SLA 59-17598

Sci
Feb 60
Vol 2, No 10

108,842

On the Question of the Preparation of Specific
Adsorbents, by Z. A. Vysotskiy, M. V. Polyakov,
6 pp. UNCLASSIFIED

RUSSIAN, per, Zhurnal Fizicheskoy Khimii, Vol
30, No 8, 1956, pp 1901-1902.

ATIC F-TS-9485/III

Sci - Chem
Jul 58

66,427

Experimental Confirmation of the Presence of the
Oxonium form of Ethylene Oxide in Aqueous Solutions,
by P. V. Zimakov.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 8, 1956,
pp 1904-1905.

CSIRO 3441

Sci
Apr 59

84, 472

Investigations Into the Effect of Chemical Structure
by E. A. Krotova et al.

RUSIAN, par, Zhur Fiz Khim, Vol XXX, No 9,
1956, p 1921.-1931.

Sci - Chemistry
Nov 57

Co-Op Tr Sch Tr 401
Australia - Australia Index 1956
53,104 (CSIRO)
CSIRO

Topoanalytical Investigations of Equilibrium
Diagrams for Multicomponent Eutectic Systems
Part I, by L. S. Palatnik, I. M. Kopeliovich, 13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIX, 1956, pp 1948-
1958.
NO 9

AEC Tr 3292

Sci - Phys

AT&T/R5-3489

Sep 58

73, 772

Kolotyrkin, Ya. M. and Kowasheva, V. M.
ON THE ELECTROCHEMICAL BEHAVIOR OF
METALS IN THE PASSIVE STATE. [1960] [15]p
15 refs.

Chemical Institute of the Academy of Sciences of the USSR, Moscow, 1960.

Transl. of *Zhurnal Fizicheskoi Khimii* (USSR) 1956,
v. 30, no. 9, p. 1690-2002.

The behavior of nickel and chromium electrodes in a potassium sulfate passivating solution was investigated by measuring the anodic solution rates at constant potential. Polarization of the electrode, accompanied by a change in the character of the potential dependence of the solution rate, was observed only in a definite polarization region, depending on the nature of the electrode metal. At potentials above the limit, the solution kinetics correspond to the Tafel equation. The hypothesis is advanced that passivation of Ni and Cr in sulfate solutions is the result of activated adsorption of the oxygen of the water on their surfaces. (Chemistry--Physical, TT, v. 5, no. 7) (over)

62-15305

1. Electrochemistry
2. Chromium-nickel alloys--Corrosion
3. Chromium
4. Kolotyrkin, Ya. M.
5. Kowasheva, V. M.
6. AlG-Ctr. 1950
7. Translations, New York

148,739

AC-1 TR-4350

Office of Technical Services

S-80/60

(NY-3547).

The Separation of Stable Isotopes of Carbon by the Counter Flow Chemical Exchange Method in the Gaseous Phase, by G. M. Panchankov, I. A. Semenokhin, A. G. Maurina, N. P. Yershova, 12 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 9, 1956,
pp 2070-2076.

JPRS 2455

Sci - Chem
Apr 60

112,618

Magnetochemistry of Active Centers. 2. Catalytic Properties of the Amorphous and Crystalline Phases of Metallic Catalysts, by I. V. Krylova, N. I. Kobozev, 8 pp,

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 9, 1956,
pp 2077-2084.

Sci Mus Lib Tr 57/2822

Sci - Chem
Mar 58

59,779

S-83/60

(NY-3547).

The Temperature Relationship of the Coefficient
of Nitrogen Isotope Separation During the
Chemical Exchange Between Ammonia and a
Solution of Ammonium Nitrate, by V. Yu.
Orlov, N. N. Tunitsky, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 9,
1956, pp 2085-2089.

JPRS 2474

113,845

Sci - Chem
Apr 60

Hydrogen Exchange Between Aromatic Hydrocarbons
and Liquid Deuterium Bromide, by A. I. Shatenshtein,
V. A. Kalinchenko, Ya. M. Varshavskiy, 8 pp.
UNCL

Vol XXX,
RUSSIAN, per, Zhur Fiz Khim, /No 9, pp 2093-2097.

17-10-1959

Sci Mus Lib 58/1910

AERE 781

Sci - Chem
Mar 59

83,402

Hydrogen Exchange Between Benzene and Naphthalene Derivatives and Liquid Deuterium Bromide, by A. I. Shatenshtein, V. R. Kalinachenko, Ya. M. Varshavskiy, 11 pp. UNCL

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 9, 1956,
pp 2098-2105.

Sci Mus Lib 58/1911

Sci - Chem
Mar 59

83,403

Heat of Adsorption of Hexane Vapours on
Carbon Blacks. Thermodynamics and
Adsorbed Forces, by N. N. Avgul.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX,
No 3, 1956, pp 2106-2121.

9

NLL M.4064

Sci - Chem

186, 696

Feb 62

Study of the Kinetics of Ion-Exchange Sorption.
I. Kinetics of Complete Exchange of Cations, by
E. P. Chernava, V. V. Ekkrasov, N. N. Tunitskiy,
11 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, 1956,
pp 2185-2189.

Sci Mus Lib Tr 57/3140

Sci - Physics
Mar 58

60,527

The Heats of Formation of Titanium Silicides, by Yu.
M. Golutvin, 12 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 10, 1956,
p 2251.- 9095557

2151.

AEC Tr-4862

Sci - Phys, Chem
Mar 62

186, 486

Equilibrium steam-liquid in system water-formic acid. By N. E. Melnikov, 12 pp.
RUSSIAN, per, Zhurnal Fizicheskoi Khimii,
1956, Vol 30, pp. 2290-2293
ETC69-29687

Nov 69

~~394,~~
396,047

Kinetic Features of the Oxidation of ~~EB~~ Cyclohexane
in the Presence of Cobalt Stearate, by E. T.
Denisov, N. M. Emanuel.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 10, 1956,
pp 2327-2336.

AMIS RJ-1169

Sci - Phys, Chem
Apr 60

114540

Use of Crystallization Processes to Obtain Ultra-Pure Substances, by D. A. Petrov, B.A.
Kolachev, 19 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 10, pp
2340-~~2347~~²³³⁷, 1956.

SIA R-1632

Sci. - Chem
Aug 58

70.617

The Cathodic Reduction of Oxygen as a Function of
the Orientation and Structure of the Electrode
Crystals. I. The Reduction of Oxygen on Tin,
by V. N. Nikulin and S. M. Kochergin, 4 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 10,
1956, pp 2337-2339.

AT&T R5-222

458-50J17R

Assoc Tech
Rev 71, 208

Sci

AUG 58

S-79/60

(NY-3546).

The Separation of Boron Isotopes by Thermo-Diffusion,
by G. M. Panchenkov, V. D. Moiseyev, Yu. A. Lebedev,
9 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 10, 1956,
pp 2348-2352.

JPRS 2477

Sci - Chem
Apr 60

114, 723

An Investigation of the Mechanism of Catalytic Hydrogenation of Organic Sulfur Compounds over an Iron-Chromium Catalyst Using Labeled Atoms. II. Investigations of Isotopic Exchange Reactions, by F. P. Ivanovskiy, R. S. Kalvarskaya, G. S. Beskova, N. P. Sokolova, 4 pp.

RUSSIAN, per, ~~Zhur Fiz Khim~~, Vol XXX, No 10, 1956,
pp 2353-2355

Assoc Tech Serv-42J8R

Sci
Apr 59

84,865

Methods for Calculating the Properties of Ternary Systems from Experimental Data on Binary Systems, by S. D. Gromakov, 14 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, 1956, pp 2373-2383.

Sci. & Eng. Lib. 1956

SLA R-2140

DSIC 240 M. 2 1957

(1956)

Sci

Aug 58

72,166

Equilibrium in the Hydrogen and Methyl Radical Addition and Substitution Reactions with Unsaturated and Saturated Hydrocarbons, by A. D. Stepukhovich,
22 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, 1956, pp
2387-2398.

SLA R-3306

Sci

Aug 59

95, 141

<p>Bogdanovskiy, G. A. and Shlygin, A. I. THE MECHANISM OF ELECTROOXIDATION OF ALCOHOLS AND ALDEHYDES ON PLATINUM. THE MECHANISM OF ELECTROOXIDATION OF ETHYL ALCOHOL. [1960] 8p. Order from ATS \$14.45 ATS-58M47R Trans. of Zhurnal Fizicheskoy Khimii (USSR) 1957, v. 31, no. 11, p. 2428-2434.</p> <p style="text-align: center;"><i>148, 641</i></p> <p>(Chemistry--Physical, TT, v. 5, no. 7)</p>	<p>61-12640</p> <p>I. Alcohols--Oxidation 2. Aldehydes--Oxidation 3. Platinum--Chemical reactions 4. Ethanol--Oxidation 5. Title: Electrooxidation I. Bogdanovskiy, G. A. II. Shlygin, A. I. III. ATS-58M47R IV. Associated Technical Services, Inc., East Orange, N. J.</p>	
<p>Office of Technical Services</p>		

Investigation of the Process of Hardening of Phenol-Formaldehyde Resins. I. Investigation of Resols,
by V. A. Kargin, et al.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 11,
1956, pp 2435-2440.

Co-op Tr Sch Tr 429

Sci - Physics
Mar 58

59, 341

An Equation for Calculating the Heats of Formation of Electrolytes and the Heats of Ionization of Chemical Elements, by I. N. Ciochina, 5 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, 1956,
pp 2441-2443.

SLA R-2139

Sci

Aug 58

72, 170

Krylova, I.V. and Kobozev, N.I.
MAGNETOCHEMIE DES CENTRES ACTIFS. III. ÉTUDE
DE MAGNETIQUE DU PROCESSUS PHOTOGRAPHIQUE
(The Magnetochemistry of Active Centres. III. A
Magnetic Investigation of the Photographic Process).
14p. 14refs. CNRS-XVIII 58.
Order from OTS, EIC or CNRS SE,60. TT-62-28869

Trans., in French, of Zbornik Fizicheskoy Khimii (USSR)
1956, v. 30, no. 11, p.2483-2488.

DESCRIPTORS: *Photographic emulsions, Silver com-
pounds, Halogen compounds, *Magnetic properties,
Ultraviolet radiation.

TT-62-28869

I. Krylova, I.V.
II. Kobozev, N.I.
III. CNRS-XVIII 58
IV. Centre National de la Recher-
che Scientifique, Paris

(Materials--Photographic, TT, v. II, no. 8)

Office of Technical Services
European Translations Center

III. Normal Combustion of Chlorine-Hydrogen Mixtures, by A. I. Rozlovskiy, 19 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX,
No 11, 12, 1956, pp 2489-2498, ~~SECRET~~.
9682730

PTD-TT-62-1688

Sci-Chem
May 63.

227, 4:4

Afanas'ev, A.S. and Chankova, E.N.
PHÉNOMÈNES DE RÉDUCTION ÉLECTROLYTIQUE
AVEC L'ACIER OXYDÉ. III. RÉDUCTION ÉLECTRO-
LYTIQUE DES OXYDES DU FER (Elektrovosstanovitel'-
nye Protsessy na Okislennoi Stali. III. Elektrovossta-
novlenie Okislovoi Zheleza) (Electrolytic Reduction Pro-
cesses on Oxidized Steel. III. Electroreduction of the
Oxides of Iron). 22p. (Foreign text included) 24refs,
CNRS-VIII bls 413.
Order from OTS, ETC or CNRS \$0.85 TT-62-28145

Trans. in French of Zhurnal Fizicheskoi Khimii (USSR)
1956, v.30, no.11, p.2525-2532.

DESCRIPTORS: Steel, Oxidation, *Reduction, Electro-
lysis, Surfaces, *Alkaline cells, Cathodes, *Iron
compounds, Oxides, Electric potential.

(Metallurgy--Ferrous Metals, TT, v. 11, no. 7)

TT-62-28145

- I. Afanas'ev, A.S.
- II. Chankova, E.V.
- III. CNRS-VIII bis 413
- IV. Centre National de la Recherche Scientifique, Paris

Office of Technical Services
European Translations Centre

A Study of Adsorption of Simple Gases on Metallic Single Crystals Using the Emission Microscope-Projector, by S. Z. Roginskiy, I. I. Tret'yakov.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 11, 1956,
pp 2539-2546.

Assoc Tech Sv Te
\$10.95

Sci - Chemistry
Aug 57

51,530

RT-770

A Study Using Tagged Atoms, of the Mechanism of
the Catalytic Hydrogenation of Organic Sulfur
Compounds Over an Iron-Chromium Catalyst. Part
3. A Study of a Sulfided Catalyst, by F. P.
Ivanovskiy, R. S. Kal'varskaya, G. S. Beskova,
N. P. Sokolova, 6 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 11,
1956, pp 2555-2559.

52, 263

Assoc Tech Sv 80J14R
AT&T/KJ-703

Sci - Nuclear Physics

X
The Absorption of Hydrogen Chloride and
Hydrogen Bromide by Aqueous Solutions of
Orthophosphoric Acid, by S. G. Entalis and
N. M. Chirkov, 14 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, 1956,
pp 2568-2579.

SLA R-2138

Sci

Aug 58

72,126

Papko, S.I. and Nikolayev, I.A.
AU SUJET DE L'ÉTUDE DE LA CINÉTIQUE DES
RÉACTIONS PAR LA MÉTHODE DES VÈNES (K
Voprosu Ob Issledovanii Kinetiki Reaktsii Struhmiv
Metodom) Study of Reaction Kinetics by the Flow
Method. 10p. (Foreien text included) 7refs.
CNRS VIII bis 414.
Order from OTS, ETC or CNRS \$1,10 FT-62-28191

Trans. in French of Zhurnal Fizicheskoi Khimii
(USSR) 1956, v.30, no.11, p.2582-2587.

DESCRIPTORS: *Chemical reactions, Kinetic theory,
Installation, Solutions, Mixtures, Velocity, Reaction
kinetics.

(Chemistry-Physical, FT, v. II, no. 8)

FT-62-28191

I. Papko, S.I.
II. Nikolayev, I.A.
III. CNRS-VIII bis 414
IV. Centre National de la Recherche Scientifique, Paris

Office of Technical Services
European Translations Centre

Methods for the Calculation of Properties of
Quaternary Systems From Data on Binary Systems, by
S. D. Gromakov, 21 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, 1956,
pp 2621-2639.

AEC Tr 3291

Sci --Phys

Sep 58

73, 771

Smirnova, I. I.

ON THE ACTIVATION ENERGY OF THE THERMAL DISSOCIATION OF POTASSIUM PERMANGANATE. [1962] 10p. (7 figs., 1 table omitted) 6 refs.
Order from OTS or SLA \$1.10

62-16633

Trans. of [Zhurnal Fizicheskoi Khimii] (USSR) 1956,
v. 30, no. 12, p. 2649-2655.

DESCRIPTORS: *Permanganates, *Potassium compounds, Pyrolysis, Dissociation, Energy, Reaction kinetics.

Formulas are adduced for the calculation of the activation energies in the processes of the origination (emergence) of initial centers and the nuclear growth of the solid product during the thermal dissociation of potassium permanganate. There are calculated the overall activation energy, the activation energy of the first and second stages in the process of the (Chemistry--Physical, TT, v. 8, no. 9) (over)

62-16633

I. Smirnova, I. I.

Office of Technical Services

Investigation Into the Process of Curing of Phenol-Formaldehyde Resins. II. Investigation of Resitols,
by G. L. Slonimskiy, et al.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 12, 1956,
pp 2656-2661.

Co-op Tr Sch Tr 428

Sci - Physics
Mar 58

CSIRO

59,340

Kaganer, M. G.
ISOTHERMAL JOULE-THOMPSON EFFECT AND
EQUATION OF STATE OF GASES WITH NONPOLAR
MOLECULES. [1964]. 5p. 16refs.
Order from OTC, SLA, or ETC \$1.65 TT-64-14989

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1956, v. 30,
no. 1, p. 1691-2704.

(Physics--Thermodynamics, TT, v. 11, no. 11)

TT-64-14989

I. Kaganer, M. G.

Office of Technical Services

IV. Kinetics and Mechanism of Reaction in
Flame, by A. I. Rozlovskiy, 19 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX,
No 11, 12, 1956, pp 2713-2723.

9682730

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED

PTD-TT-62-1688

Sci-Chem
May 63

~~224,415~~
CFTI IT 64-^{224,415}
15998

Corrosion Mechanism of Metals in Narrow Clearances
and Gaps. I. Mechanism of "Crevice Corrosion" of
Iron in Sodium Chloride Solutions, by I. L. ~~Ros~~
Rozenfeld, I. K. Marshakov. UNCLASSIFIED

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 12,
1956, pp 2724-2733.

9676661

SIA-59-21020
Navy 2214/NRL 729

Sci - Physics, Min/met
Jul 59

F D D/X-3461

92, 807

A Simple Radiation Detector, by L. Ya. Davidchuk,
K. V. Chmutov, 3 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, 1956,
p 2807.

AEC Tr 2948

Sci - Physics
Aug 57

51,836

The Overvoltage During the Evolution of Chlorine,
by O. Ksenzhek.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 12,
1956, p 2812.

NLL M. 3659

Sci - Chem

201, 155

Aug 52

Kinetics of Reactions at the Surfaces of Solids and the Problem of the Catalyst of Maximum Activity, by M. I. Temkin.

RUSSIAN, per, Zhur Fiz Khim,
Vol XXXI, No 1, 1957, pp 3-26.

CSIRO

Sci - Chem
Feb 69

186,567

Study of the Atomic-Molecular Structure of
Certain Oxides by the Method of Radial
Distribution, by N. A. Shishakov.
RUSSIAN, per, Zhur Fiz Khim, Vol XXXI,
No 1, p36, 37, 41, 1957. 9230450

AEC - SC-T-65-744

Sci=Elect
Dec 65

3
292,322

The Relation Between Changes in Temperature, Pressure,
and Composition of Binary Azeotropes, by A. V.
Storonkin, A. G. Morachevskiy,

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 1, 1957,
pp 42-48.

ATS RJ-2178

Sci - Chem

May 60

115,447

The Mechanism of Metal Corrosion in
Narrow Clearances and Crevices,
by I. L. Rozenfel'd and I. K.
Marshakov.

RUSSIAN, per, Zhurnal Fizicheskoy
Khimii, 1957, Vol 31, No 1, pp 72-82.
NLL RIS 2394

CFSTI TT 64-19936

Aug 65

287,002

The Dynamic Method of Determining Metal
Vapor Pressures, by S. P. Detkov, 11 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI,
No 1, 1957, pp 83-92. 9207840

PL-480
OTS 63-11097

230,371

Sci - Physics
Jun 63
IPST No 983

The Rate of Catalyst Carbonization in the
Dehydrogenation of N-Butane, by I. Ya. Turyayev,
A. M. Bushin, 10 pp.

RUSSIAN, ~~per~~ per, Zhur Fiz Khim USSR, Vol XXXI,
No 1, 1957, pp 93-99.

SLA 59-15304
ATS RJ-840

Sci
Dec 59
Vol 2, No 1;

102, 779

Study of the Polymerization of γ -Tert.-Butylphenyl Methacrylate, by S. E. Breiter, T. V. Sharovskaya, S. I. Frankel, M. G. Zhemchuzhina, 9 pp.

RUSSIAN, per, Zhur Fiz Khim, No 1, 1957, pp 109-116.

Asses Tech Serv-9376R

b9,95

Sci
Aug 58

68,275

Polarization of the Inner Surface of a Tube, by
O. S. Kuzenkov, V. V. Stender, 22 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1957,
pp 117-127. 92:1375

AEC-Tr-5-20

Sci - Phys

Sep 03

Kinetics Of Dehydrogenation Of Alcohols by A.A.
Balandin and S.L.Kipprman.

RUSSIAN, per, Zhurnal Fizicheskoi Khimii, Vol XXXI,
No 1, 1957, pp 139-149.

CSIRO

Oct. 62

Mechanism of Flotation. Fixing of Particles on
Boundary Between Water and Air Bubbles, by Z. V.
Volkova, 11 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol IX, 1957, pp
182-189.

SIA R-3317

Sci
Jul 59

93,035

Effect of Internal Diffusion on the Course
of a Heterogeneous Catalytic Reaction
Retarded by the Reaction Product, by
V. M. Cherednichenko, et al.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI,
No 1, 1957, pp 157-164.

CSIRO

Sci - Chem

181, 678

Mar 62

On the Nature of "Secondary" Potentials in
Fused & Salts, by L. N. Antipin, Yu. B.
Kholmanskih.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI,
1957, pp 232-237.

Consultants Customs Tr

CCP-240B
\$31.50

TT-64-30096

Sci - Chem

K-H

Mar 59

83,468

Kiselev, A. V. and El'mekov, Yu. A.
ABSOLUTE ADSORPTION ISOTHERMS OF NORMAL-
ISO- AND CYCLOPENTANE VAPOURS ON QUARTZ
AND SILICA GELS. [1961] [15] p. 41 refs. C. E.
Trans. 1946; [DSIR LLU] M. 4017.
Order from OTS or SLA \$1.60 61-28189
Trans. of Zhurnal Fiz.[chenkol.] Khim.[ii] (USSR) 1957
[v. 31] no. 1, p. 250-262.

DISCRIPTORS: *Hydrocarbons, *Cyclopentanes,
Pentanes, Vapors, Adsorption, *Quartz, Powders,
*Silicon Compounds, Dioxides, *Gels, Adsorbents.

by a vacuum capillary microburette method adsorption
isotherms were determined for n-pentane and cyclo-
pentane on quartz powder and silica gels of different
structural types and the absolute and derived adsorp-
tion isotherms calculated. The absolute adsorption
isotherm of pentane on quartz coincide with the abso-
(Chemistry--Physical, TT, v. 6, no. 12) (over)

61-28189

I. Kiselev, A. V.
II. El'mekov, Yu. A.
III. CE Trans-1946
IV. DSIR LLU M. 4017
V. Central Electricity
Generating Board
(Gt. Brit.)

Office of Technical Services

Theory of the Cascade for the Separation of Binary
Mixtures of Isotopes, by O. K. Davtyan, 12 pp.
^B

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1957,
pp 283-290.

AEC IGRL-T/CA 70

Sci - Phys

Oct 58

74,590

The Physicochemical and Electrical Properties of
the System TiO_2-ZrO_2 , by Y. M. Ksendzov, V. G.
Prokhvatilov, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 2, pp
321-327, 1957.

Assoc Tech Serv 63J16R
ATS RJ-855

Sci - Chem
Aug 58

70,665

On the Mechanism of Metal Corrosion
Under Thin Layers of Electrolytes,
by I. L. Rozenfeld and T. I.
Pavlutsakaya.

RUSSIAN, per, Zhurnal Fizicheskoy
Khimii, 1957, Vol 31, pp 328-339.
NLL RTS 2395 (On Loan or Purchase)

CFSTI TT 65-60361

Aug 65

288,868

Study of the Transformation Sequence of the Principal Intermediate Products of the Liquid-Phase Oxidation of Cyclohexane by the Method of Lebeled Atoms, by I. V. Berezin, L. S. Vartanyan, B. G. Dzantyev, N. F. Kuzanskaya, N. M. Emanuel, 13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1957,
pp 340-349.

ATS 96J17 R

Sci - Chem, Nuclear Phys

129,778

Oct 60

Determination of Heat of Transition in Cerium Under Pressure, by M. G. Gonikberg, G. P. Shakhovskoy, V. P. Butuzov, 7 pp. UNCLASSIFIED

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 2, 1957,
pp 350-353. *CBAB-20744*

AEC Tr 3222

Sci - Phys

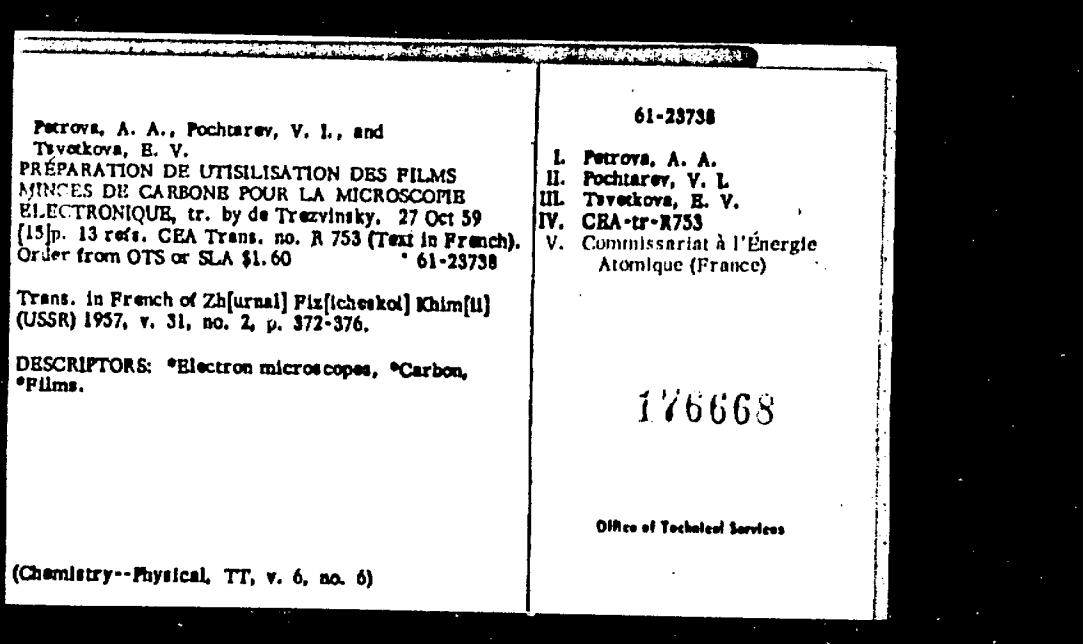
May 58

64,814

The Production of Carrier-Free ^{113}Cd by Irradiating
a Tin Metal-Organic Compound With Neutrons,
by V. D. Nedkov, G. N. Lepovet, et al., 12 pp.
RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1957,
pp 354-361. 9200219
AEC-ORNL-Tr-541

Sci-Chem
Aug 65

286,391



Liquid-Phase Oxidation of Hydrocarbons
in the Presence of Liquid Tetraethyl
Lead, by G. S. Shimansov, I. V. Bushkov,
15 pp.
RUSSIAN, perj Zhurnal Fizicheskoi Khimii,
Vol 31, No 2, 1957, pp 387-394.
SLA TT-65-10326

336,222

Sei
Aug 67

The Effects of Temperature and Pressure on the
Composition of Ternary Azeotropes, by A. V.
Storonkin,

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 2,
1957, pp 395-402.

ATS RJ-2179

Sci - Chem

May 60

115 448

Theory of Ion Exchange Dynamics. IV. Equation
of Motion of a Steady Front, by V. V. Rachinskiy,
14 pp.

RUSSIAN, per, Zhur Fiz, Khim, Vol XXXI, 1957,
pp 444-451.

AEC/NP-147

Sci - Phys

Nov 58

76,459

Smirnov, M. V. and Ivabovskii, E. E.
THE DECOMPOSITION POTENTIAL OF FUSED LEAD
AND THORIUM CHLORIDES. [1963] 12p (figs omitted)
Order from K-H \$12.00
K-H-8024-b

Trans. of Zhurnal Fizicheskoy Khimii (USSR) 1957,
v. 31 [no. 2] p. 467-473.

DESCRIPTORS: *Chlorides, *Thorium compounds,
*Lead compounds, Fused materials, Decomposition

SLA TT-64-30093

63-22818

- I. Smirnov, M. V.
- II. Ivabovskii, E. E.
- III. K-H-8024-b
- IV. Kreage-Hooker Science
Library Associates,
Detroit, Mich.

(Chemistry--Physical, TT, v. 10, no. 12)

Office of Technical Services

On the Form of Equilibrium Curves of Binary Alloys,
by A. K. Gorbatenko, D. S. Kamenetskaya.

RUSSLAN, per, Zhur Fiz Khim, Vol XXXI, No 2, 1957,
pp 481-484.

Fulmer Reg Inst
Stoke Poges, Bucks.

Sci - Chem

Sep 60

1026, 112

Kinetic Study of the Dimerization of Cyclopentadiene, by M. I. Shuikin, T. I. Naryshkina, 9pp
RUSSIAN, per, Zhurnal Fiz Khim, Vol 31, 1957,
No 2, pp 493-497
SIA TT-64-30126

Sci - Chem

May 67

326,654

Paramagnetic Resonance of Products Formed at Low
Temperatures by the Dissociation in the Glow
Discharge of H₂O, H₂O₂ and D₂O Vapors, by A. I.
Gorbanev, S. D. Kaitmazov, A. M. Prokhorov, A. B.
Tsentsiper, 31 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1957, pp
515.

AEC 3329

Sci - Phys

Oct 58

74, 877

Determination of the Structural Nature
and Specific Surface of a Porous Body
According to the Isotherms of Desorption,
by B. V. Dericugin.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI,
No 2, 1957, pp 516-518.

CSIRO

Sci - Chem

Feb 62

186, 566

Structure of Some Liquids. II. Structure of
Water and of Aqueous Solutions of Electrolytes,
by O. Ya. Samoilov,

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 3, 1957,
pp 537-553.

ATS RJ-1261

Sci - Phys, Chem
Apr 60

114,575